Scientific Program
16th International Congress on Photosynthesis Research
St. Louis, MO, USA
August 11-16, 2013

Track 1 - Photosynthesis: Solar Energy Capture and Conversion

Plenary talk topics:
1. Excitation energy transfer
   Rienk van Grondelle – VU University, Amsterdam
2. Reaction center/light harvesting
   Neil Hunter – University of Sheffield
3. PS II & Oxygen evolution
   Jian-Ren Shen – Okayama University
4. Genomic biology of photosynthesis
   Sabeeha Merchant – University of California, Los Angeles
5. Photosystem structure
   Petra Fromme – Arizona State University

Symposium topics:
1. Light harvesting
   Herbert van Amerongen – Wageningen University – Chair
   Zhenfeng Liu – Chinese Academy of Sciences, Beijing
   Roberta Croce – VU University, Amsterdam
   Alexandra Olaya-Castro – Univeristy College, London
   Yang Zhao – Nanyang Technological University, Singapore
2. Water oxidation
   Holger Dau – Freie University, Berlin – Chair
   Nicholas Cox – Max Planck Institute, Mulheim
   Per Siegbahn – University of Stockholm
   Alain Boussac – CEN Saclay
   Junko Yano – Lawrence Berkeley National Laboratory
3. Reaction center function
   Kevin Redding – Arizona State University – Chair
   Chris Kirmaier – Washington University in St. Louis
   Laszló Kálmán – Concordia University
   John Golbeck – Penn State University
   Vladimir Shuvalov – Belozersky Institute
4. Electron and proton transfer
   Leif Hammarstrom – Uppsala University – Chair
   Fabrice Rappaport – CNRS
   Artur Osyczka – Jagiellonian University
   Rob Burnap – Oklahoma State University
   Giovanni Finazzi – CEA Grenoble
5. Membrane dynamics
   Helmut Kirchhoff – Washington State University – Chair
   Egbert Boekema – University of Groningen
Conrad Mullineaux – Queen Mary University of London
Robert Niederman – Rutgers University
Andreas Weber – University of Dusseldorf

6. Chloroplast development
   Lixin Zhang – Chinese Academy of Sciences – Chair
   Kathy Osteryoung – Michigan State University
   Danny Schnell – University of Massachusetts, Amherst
   Mark Schöttler – Max Planck Inst. of Molecular Plant Physiology
   Michael Hippler – University of Munster

7. Carotenoids
   Harry Frank – University of Connecticut – Chair
   Tomáš Polivka – University of South Bohemia
   Luca Dall’Osto – University of Verona
   Diana Kirilovsky – CEN, Saclay
   Manuel Rodríguez Concepción – CRAG, Barcelona

**Track 2: Environment, Adaptation and Climate Change**

**Plenary talk topics**

1. Global Photosynthesis: Past, present, future
   David Beerling – The University of Sheffield

2. Photosynthesis, respiration, and organelle communication
   Christine Foyer – University of Leeds

3. Oxygenation and photorespiration
   Veronica Maurino – Heinrich-Heine University

4. Evolutionary adaptation of photosynthetic types to the environment
   Erika Edwards – Brown University

5. Photosynthesis in the marine environment
   Gabrielle Rocap – University of Washington

**Symposium topics**

1. Carbon for water: CO₂ diffusion and the role of stomata
   Keith Mott – Utah State University – Chair
   Jenny McElwain – University College Dublin
   Mike Blatt – University of Glasgow
   Tim Brodribb – University of Tasmania
   Asaph Cousins – Washington State University

2. Regulation of the C3 carbon reduction cycle
   Ron Milo – Weizmann Institute – Chair
   Amane Makino – Tohoku University
   Mike Salvucci – US Department of Agriculture
   David Stern – Boyce Thompson Institute for Plant Research
   Francesca Sparla – Univ of Bologna

3. Photoassimilate use: Transport and partitioning
   Dan Bush – Colorado State University – Chair
   Michael Knoblauch – Washington State University
   John Ward – University of Minnesota
   Mechthild Tegeder – Washington State University
   Christina Kuhn – von Humboldt University
4. C4/CAM and CO₂ concentration mechanisms
   Rowan Sage – University of Toronto – Chair
   Sarah Covshoff – University of Cambridge
   James Hartwell – University of Liverpool
   Robert Sharwood – University of Western Sydney
   Nerea Ubierna – Australian National University, Canberra

5. Photosynthetic processes at larger scales
   Russ Monson – University of Arizona – Chair
   Dennis D. Baldocchi – University of California, Berkeley
   Ulli Seibt – University of California, Los Angeles
   Carl Bernacchi – University of Illinois
   Joe Berry – Carnegie Institution of Washington, Stanford

6. Photosynthesis in a changing global environment
   Lisa Ainsworth – University of Illinois – Chair
   Joy Ward – University of Kansas
   Nate McDowell – Los Alamos National Laboratory
   Toshi Hasegawa – National Institute of Agroenvironmental Science, Tsukuba
   Jeff Dukes – Purdue University

Track 3: Bioenergy and Food
Plenary Talks:
1. Sustainable Supply of Food for 2050
   Rob Horsch – Gates Foundation
2. Sustainable Supply of Energy for 2050
   John Pierce – BP London
3. Food vs. Fuel: Facts, Fiction, and Future
   Jeremy Woods – Imperial College, London
4. Artificial Systems for Bioenergy
   Lee Cronin – University of Glasgow
5. Mechanism of Stomata Sensing
   Julian Schroeder – University of California, San Diego

Symposium Topics
1. Photosynthesis and Bioenergy
   Roger Prince – EXXON/Mobil – Chair
   Jennifer Cunniff – Rothamsted Research
   Sarah Davis – University of Ohio
   Christoph Benning – Michigan State University
   Amanda Pereira de Souza - University of Sao Paulo
2. Carbon Cycling Impacts of Agriculture
   Evan DeLucia – University of Illinois – Chair
   Andy Suyker – University of Nebraska
   Gail Taylor – University of Southampton
   Roser Matmala – Argonne National Lab
   Marcelo Galdos – INPE Brazil
3. Increasing Crop Photosynthesis to address Global Food Security
   Steve Long – University of Illinois – Chair
   Paul Quick – International Rice Research Institute
4. Photosynthetic phenomics
   - Dave Kramer – Michigan State University – Chair
   - Jeremy Harbinson – Wageningen University
   - Bob Furbank – Australian National University
   - Tracy Lawson – University of Essex
   - Phil Townsend – University of Wisconsin

5. Biomimicry of photosynthesis for energy
   - Anne Jones – Arizona State University
   - Ally Aukauloo – University of Paris, Orsay
   - Gary Moore – Lawrence Berkeley National Laboratory
   - Tom Moore – Arizona State University
   - Ronald Koder – City College of New York

6. Learning from CO₂ Concentrating Mechanisms for Increasing Productivity
   - Howard Griffiths – University of Cambridge – Chair
   - Bernard Genty – CNRS/CEA, Cadarache
   - Dean Price – Australian National University
   - James Moroney – Lousiana State University
   - Jaume Flexas – Universitat de les Illes Balears

7. Addressing Inefficiencies of Rubisco and Photorespiration
   - Spencer Whitney – Australian National University – Chair
   - Bob Spreitzer – University of Nebraska
   - Martha Ludwig – University of Western Australia
   - Martin Hagemann – University of Rostock
   - Manajit Hayer-Hartl – Max Planck Institute of Biochemistry, Martinsreid